## LISTING OF THE CLAIMS

1. (**Previously Presented**) A method of evaluating the power of a muscle group of a person, comprising:

initializing a resistance element to a first resistance level;

moving an engagement assembly coupled to the resistance element at a highest achievable velocity through an exercise stroke;

measuring a representative velocity at which the engagement assembly is moved through the exercise stroke and collecting data responsive to the representative velocity;

increasing the resistance level of the resistance element;

repeating the acts of moving, measuring and increasing until sufficient data are collected;

calculating power for each exercise stroke based on the resistance level for each exercise stroke and the representative velocity for each exercise stroke; and

determining a maximum power for the muscle group.

2. (**Original**) The method as defined in Claim 1, further including determining a velocity and a resistance level where the maximum power is produced.

3. (**Original**) The method as defined in Claim 1, wherein the resistance element is a pneumatic cylinder in which the engagement assembly causes a piston within the pneumatic cylinder to move against air pressure in the pneumatic cylinder.

4. (**Original**) The method as defined in Claim 1, wherein the engagement assembly is configured as a chest press, and wherein a first handgrip is provided for a left hand of a subject and a second handgrip is provided for a right hand of a subject, each handgrip being coupled to a respective resistance element, the act of measuring being performed independently for each handgrip to provide an independent power measurement for each arm of the subject.

5. (**Original**) The method as defined in Claim 1, wherein the time between the act of measuring selectively increases as the resistance level increases to enable the muscle group to rest between successive acts of moving the engagement assembly.

6. (**Previously Presented**) The method as defined in Claim 3, wherein the velocity is determined by periodically measuring a position of the piston, and the velocity is calculated based on the distance moved during a known time interval.

7. (**Original**) The method as defined in Claim 1, wherein sufficient data are collected when the resistance level is sufficient to preclude moving the engagement assembly through a complete exercise stroke.

8. (**Original**) The method as defined in Claim 1, wherein sufficient data are collected when the resistance level is incremented to a predetermined level.

9. (**Original**) The method as defined in Claim 1, wherein sufficient data are collected when a predetermined number of exercise strokes are completed.

10. (**Withdrawn**) A system for evaluating the power of a muscle group of a person, comprising:

a variable resistance element automatically adjustable to produce a sequence of increasing resistance levels;

an engagement assembly coupled to the resistance element to move against the resistance provided by the resistance element during an exercise stroke;

a position transducer sampled at predetermined time intervals to enable determination of a representative velocity at which the engagement assembly is moved through the exercise stroke at a highest achievable velocity for the resistance level coupled to the engagement assembly; and

a power calculation system that calculates the power for each exercise stroke based on the resistance level for each exercise stroke and the representative velocity for each exercise stroke, the power calculation system determining a maximum power over the sequence of increasing resistance levels for the muscle group and determining a velocity and a resistance level where the maximum power is produced.

11. (**Withdrawn**) The system as defined in Claim 10, wherein the resistance element is a pneumatic cylinder in which the engagement assembly causes a piston within the pneumatic cylinder to move against air pressure in the pneumatic cylinder.

12. (**Withdrawn**) The system as defined in Claim 10, wherein:

the engagement assembly is configured as a chest press having a first handgrip for a left hand of a subject and having a second handgrip for a right hand of the subject;

the variable resistance element comprises a first resistance element coupled to the first handgrip and a second resistance element coupled to the second handgrip, each resistance element including a respective position transducer; and

the power calculation system calculates the power independently for each arm of the subject.